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## 6. (Amended) A gamma correction block, comprising:

a gamma correction lookup table, wherein the gamma correction lookup table stores gamma correction data corresponding to a plurality of gamma correction curves, wherein the gamma correction lookup table provides a plurality of sets of gamma corrected data in response to a set of input data, wherein the plurality of sets of gamma corrected data includes a set of gamma corrected data for each of the plurality of gamma correction curves; and

a selection block operably coupled to the gamma correction lookup table, such that the selection block automatically receives the plurality of sets of gamma corrected data and selects a selected set of gamma corrected data from the plurality of sets of gamma corrected data based on a gamma selection information.

## 8. (Amended) A gamma correction circuit comprising:

a lookup table that stores gamma corrected data corresponding to a plurality of gamma correction curves, wherein the lookup table receives input signals that select a plurality of gamma corrected data sets from the lookup table, wherein a first portion of the input signals select a portion of the plurality of gamma correction curves, and wherein a second portion of the input signals selects the plurality of gamma corrected data sets from the portion of the plurality of gamma correction curves;

a selection block operably coupled to the lookup table, wherein the selection block receives selection signals and the plurality of gamma corrected data sets and selects a selected data set from the plurality of gamma corrected data sets.

## 9. (Amended) A gamma correction circuit comprising:

means for storing a plurality of gamma corrected data sets corresponding to a plurality of gamma correction curves, wherein the plurality of gamma corrected data sets are precomputed; and

means for selecting a gamma corrected data set based on curve information, wherein the means for selecting is operably coupled to the means for storing such that means for storing provides the plurality of gamma corrected data sets to the means for selecting, such that the means for selecting selects a selected curve from the

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plurality of gamma correction curves and position information that selects the gamma corrected data set at a corresponding position on the selected curve.

20. (Added 12/06/02) A video graphics circuit comprising:

a frame buffer, wherein the frame buffers stores display information;

a gamma correction block operably coupled to the frame buffer wherein the gamma correction block stores a plurality of sets of precomputed gamma corrected data corresponding to a plurality of gamma correction curves, wherein the gamma correction block receives the display information and gamma selection information, wherein the gamma correction block provides gamma corrected data in response to the display information from a gamma correction curve selected by the gamma selection information; and

a digital to analog converter operably coupled to the gamma correction block, wherein the digital to analog converter receives the gamma corrected data and generates an analog display signal.

21. (Added 12/06/02) A video graphics circuit comprising:

a frame buffer, wherein the frame buffers stores display information;

a gamma correction block operably coupled to the frame buffer wherein the gamma correction block stores a plurality of sets of precomputed gamma corrected data corresponding to a plurality of gamma correction curves, wherein the gamma correction block receives the display information and gamma selection information, wherein the gamma correction block provides gamma corrected data in response to the display information from a gamma correction curve selected by the gamma selection information; and

a video graphics processor operably coupled to the frame buffer, wherein the video graphics processor generates at least a portion of the display information stored in the frame buffer.

22. (Added 12/06/02) A method for gamma correction in a video graphics system, comprising:

receiving pixel information;

selecting a set of gamma corrected data from a plurality of sets of precomputed gamma corrected data based on the pixel information and gamma selection information, wherein the plurality of sets of precomputed gamma corrected data include gamma corrected data corresponding to a plurality of gamma correction curves; and  
converting the set of gamma corrected data from a digital format to a portion of an analog display signal.

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